

REMARKS

Claim 1-4 and 8-10 are pending in the application. Claim 10 has been withdrawn.
Claims 1-4 and 8 are amended herein. Support for the amendments is detailed below.

Applicants' Response to the Claim Rejections under 35 U.S.C. §102

Claims 1, 3, 4, 8 and 9 are rejected under 35 U.S.C. §102(b) as being anticipated by JP 2808383 (hereinafter "JP '383") to Kubota Corp.

In response thereto, applicants respectfully submit that JP '383 does not anticipate the claims as now presented for at least the reason that the references does not provide for each and every feature of the claims either expressly or inherently.

Specifically, JP '383 at least fails to provide for the features of parent claims 1 and 8 as now presented of a detector for detecting a pressure or a flow rate of water and a control device for controlling the actuating means.

JP '383 is directed to a water-lifting apparatus comprising a suction tank 1, a discharge tank 2, a pump 3, discharge piping 6 and actuating means 7, 8. Further, the rejection is apparently citing to the relief valve 13 as a reverse flow prevention mechanism and that there is a back flow rate control means for controlling the flow rate of the backflow from the discharge piping when the operation of the pump is stopped. As to claim 8, the Office Action asserts that the mechanism reduces the blade angle of the pump prior to stopping operation.

In regard to the remaining claimed limitations of water flows in the pump within the limits of allowing vibrations of the pump based on a detected value to thereby lower the water

level gradually in the discharge piping, the claims as now recited clearly include the detector and control device.

Under U.S. patent law, in order for a claim to be anticipated under 35 U.S.C. §102, the single cited prior art reference must provide for all the features of the claimed invention and arranged as set forth in the claim. "[U]nless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. §102." *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008).

In the current instance, JP '383 does not provide for the detector for detecting a pressure or a flow rate of water and a control device for controlling the actuating means as set forth in the current claims 1 and 8.

As set forth in one possible example of the current invention, depicted at Fig 3 of the current application, a control device 90 is controlling an actuating means 60 and transmission (speed reducer) 70 while being provided with a signal from a pressure detector 55. As set forth in the specification, the signal from the detecting means is used to ascertain a water level and respond by adjusting the speed of the rotation accordingly as seen in Figs. 4A to 5B and described at page 17, line 5 to page 20, line 16. Hence, the speed of the pump is controlled based on the detected value. There is no similar disclosure within JP '383.

JP '383 only discloses that prior to a stop operation either the blade angle is reduced or the number of revolutions (speed) is decreased. However, neither of these operations are based

on a detected value of pressure, water level or a flow rate by a detector. Applicants note that the rejection also refers to the relief valve 13 which discharges into the tank 1. However, this valve 13 is not a detector as required by the claims. Specifically as to parent claim 8, the disclosures of a reduced blade angle are likewise not related to detection from a detector. Hence, claim 8 is likewise not anticipated for the reasons above.

Wherefore, applicants respectfully submit that parent claims 1 and 8, as well as there respective dependent claims are not anticipated by JP '383.

Applicants' Response to the Claim Rejections under 35 U.S.C. §103

Claims 1 and 3 are rejected under 35 U.S.C. §103(a) as being unpatentable over Deters, US 3,172,567.

In response thereto, applicants respectfully submit that the present invention is not obvious in view of Deter for at least the reason that Deter does not provide for all the features as claimed, nor is there a rationale prompting a skilled artisan to modify Deter so as to derive the present invention.

Specifically, similar to above, Deter does not provide for the aspects of a detector for detecting a pressure or a flow rate of water and a control device for controlling the actuating means.

The rejection characterizes the features of the claims as to the gas reservoirs 30, 30', pump 38 and gas tank of a vehicle of Deter as corresponding to the suction tank, discharge tank and pump of the present invention. The rejection further asserts that both the reverse flow

preventing mechanism and the back flow control means are equivalent to the diaphragm 90. Specifically, at page 4 of the Office Action, the rejection asserts that the diaphragm valve 90 and plunger 92 in header 26 as seen in fig. 3 are a reverse flow preventing mechanism and the diaphragm is also a back flow rate control means for controlling a rotational speed of based on a detected value of a pressure because the diaphragm 90 is pressure actuated and biased to close at a pressure of about 15 p.s.i.

However, there is no disclosure therein which relates that the speed of the pump 38 is controlled based on the position of the diaphragm. Rather, the diaphragm and its parts serve the function of pressure release from gasoline trapped in line 22 due to thermal expansion. See col. 4, lines 53-58.

Hence, similar to JP '383 above, the disclosures of Deter cannot be considered to provide for the element corresponding to the detector as set forth in applicant's specification. Further, as the diaphragm has a function of pressure release and is not affecting pump speed there is no manner whereby a skilled artisan would derive this feature of claim 1 based on Deter.

Wherefore, applicants respectfully submit that Deter does not provide for the structure of a detector and control device as set forth in claim 1.

Claim 2 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kubota above in view of JP 2797822 to Hitachi Ltd.

Applicants respectfully submit that by addressing the rejection of parent claim 1 as detailed above, likewise this rejection should be considered addressed by nature of its dependency.

CONCLUSION

In view of the foregoing amendments and accompanying remarks, it is submitted that all pending claims are in condition for allowance. A prompt and favorable reconsideration of the rejection and an indication of allowability of all pending claims are earnestly solicited.

If the Examiner believes that there are issues remaining to be resolved in this application, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite and complete prosecution of this case.

Application No.: 10/574,657
Art Unit: 3746

Amendment under 37 C.F.R. §1.111
Attorney Docket No.: 062316

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

/Michael J. Caridi/

Michael J. Caridi
Attorney for Applicants
Registration No. 56,171
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

MJC/dlt